

YEAR 5 – MATHEMATICS - SMALL STEPS

PLACE VALUE

Year 5 | Autumn term | Block 1 – Place value

Small steps

Step 1

Roman numerals to 1,000

Step 2

Numbers to 10,000

Step 3

Numbers to 100,000

Step 4

Numbers to 1,000,000

Step 5

Read and write numbers to 1,000,000

Step 6

Powers of 10

Step 7

10/100/1,000/10,000/100,000 more or less

Step 8

Partition numbers to 1,000,000

Step 9

Number line to 1,000,000

Step 10

Compare and order numbers to 100,000

Step 11

Compare and order numbers to 1,000,000

Step 12

Round to the nearest 10, 100 or 1,000

Step 13

Round within 100,000

Step 14

Round within 1,000,000

ADDITION AND SUBTRACTION

Year 5 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 1

Mental strategies

Step 2

Add whole numbers with more than four digits

Step 3

Subtract whole numbers with more than four digits

Step 4

Round to check answers

Step 5

Inverse operations (addition and subtraction)

Step 6

Multi-step addition and subtraction problems

Step 7

Compare calculations

Step 8

Find missing numbers

MULTIPLICATION AND DIVISION

Year 5 | Autumn term | Block 3 – Multiplication and division A

Small steps

Step 1

Multiples

Step 2

Common multiples

Step 3

Factors

Step 4

Common factors

Step 5

Prime numbers

Step 6

Square numbers

Step 7

Cube numbers

Step 8

Multiply by 10, 100 and 1,000

Step 9

Divide by 10, 100 and 1,000

Step 10

Multiples of 10, 100 and 1,000

FRACTIONS

Year 5 | Autumn term | Block 4 – Fractions A

Small steps

Step 1 Find fractions equivalent to a unit fraction

Step 2 Find fractions equivalent to a non-unit fraction

Step 3 Recognise equivalent fractions

Step 4 Convert improper fractions to mixed numbers

Step 5 Convert mixed numbers to improper fractions

Step 6 Compare fractions less than 1

Step 7 Order fractions less than 1

Step 8 Compare and order fractions greater than 1

Step 9 Add and subtract fractions with the same denominator

Step 10 Add fractions within 1

Step 11 Add fractions with total greater than 1

Step 12 Add to a mixed number

Step 13 Add two mixed numbers

Step 14 Subtract fractions

Step 15 Subtract from a mixed number

Step 16 Subtract from a mixed number – breaking the whole

Step 17 Subtract two mixed numbers

Year 5 | Spring term | Block 1 – Multiplication and division B

Small steps

Step 1 Multiply up to a 4-digit number by a 1-digit number

Step 2 Multiply a 2-digit number by a 2-digit number (area model)

Step 3 Multiply a 2-digit number by a 2-digit number

Step 4 Multiply a 3-digit number by a 2-digit number

Step 5 Multiply a 4-digit number by a 2-digit number

Step 6 Solve problems with multiplication

Step 7 Short division

Step 8 Divide a 4-digit number by a 1-digit number

Step 9 Divide with remainders

Step 10 Efficient division

Step 11 Solve problems with multiplication and division

Small steps

Step 1

Multiply a unit fraction by an integer

Step 2

Multiply a non-unit fraction by an integer

Step 3

Multiply a mixed number by an integer

Step 4

Calculate a fraction of a quantity

Step 5

Fraction of an amount

Step 6

Find the whole

Step 7

Use fractions as operators

Small steps

Step 1

Decimals up to 2 decimal places

Step 2

Equivalent fractions and decimals (tenths)

Step 3

Equivalent fractions and decimals (hundredths)

Step 4

Equivalent fractions and decimals

Step 5

Thousandths as fractions

Step 6

Thousandths as decimals

Step 7

Thousandths on a place value chart

Step 8

Order and compare decimals (same number of decimal places)

Step 9

Order and compare any decimals with up to 3 decimal places

Step 10

Round to the nearest whole number

Step 11

Round to 1 decimal place

Step 12

Understand percentages

Step 13

Percentages as fractions

Step 14

Percentages as decimals

Step 15

Equivalent fractions, decimals and percentages

Small steps

Step 1

Perimeter of rectangles

Step 2

Perimeter of rectilinear shapes

Step 3

Perimeter of polygons

Step 4

Area of rectangles

Step 5

Area of compound shapes

Step 6

Estimate area

Year 5 | Spring term | Block 5 – Statistics

Small steps

Step 1

Draw line graphs

Step 2

Read and interpret line graphs

Step 3

Read and interpret tables

Step 4

Two-way tables

Step 5

Read and interpret timetables

Year 5 | Summer term | Block 1 – Shape

Small steps

Step 1 Understand and use degrees

Step 2 Classify angles

Step 3 Estimate angles

Step 4 Measure angles up to 180°

Step 5 Draw lines and angles accurately

Step 6 Calculate angles around a point

Step 7 Calculate angles on a straight line

Step 8 Lengths and angles in shapes

Step 9 Regular and irregular polygons

Step 10 3-D shapes

Year 5 | Summer term | Block 2 – Position and direction

Small steps

Step 1

Read and plot coordinates

Step 2

Problem solving with coordinates

Step 3

Translation

Step 4

Translation with coordinates

Step 5

Lines of symmetry

Step 6

Reflection in horizontal and vertical lines

Year 5 | Summer term | Block 3 – Decimals

Small steps

Step 1 Use known facts to add and subtract decimals within 1

Step 2 Complements to 1

Step 3 Add and subtract decimals across 1

Step 4 Add decimals with the same number of decimal places

Step 5 Subtract decimals with the same number of decimal places

Step 6 Add decimals with different numbers of decimal places

Step 7 Subtract decimals with different numbers of decimal places

Step 8 Efficient strategies for adding and subtracting decimals

Step 9 Decimal sequences

Step 10 Multiply by 10, 100 and 1,000

Step 11 Divide by 10, 100 and 1,000

Step 12 Multiply and divide decimals – missing values

Year 5 | Summer term | Block 4 – Negative numbers

Small steps

Step 1

Understand negative numbers

Step 2

Count through zero in 1s

Step 3

Count through zero in multiples

Step 4

Compare and order negative numbers

Step 5

Find the difference

Year 5 | Summer term | Block 5 – Converting units

Small steps

Step 1

Kilograms and kilometres

Step 2

Millimetres and millilitres

Step 3

Convert units of length

Step 4

Convert between metric and imperial units

Step 5

Convert units of time

Step 6

Calculate with timetables

Year 5 | Summer term | Block 6 – Volume

Small steps

Step 1

Cubic centimetres

Step 2

Compare volume

Step 3

Estimate volume

Step 4

Estimate capacity

